

**Board of Patent Appeals and Interference**

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Mailing date: April 9, 2008

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By fax

In reply to Your:

- Advisory Action from February 29, 2008,
- Notification of Non-Compliant Appeal Brief from March 13, 2008,
- recommendations by phone and e-mail from March 31, 2008,

herewith I enclose the corrected Appeal Brief.

In accordance with Sections 7 and 10 of the Notification from March 13, 2008 the following amendments were made in the Appeal Brief:

- in Section 3:
  - claims 1, 4, 5, 10-13, 15, 17, 18, 21, 22 are identified as "rejected, under appeal",
  - claims 2, 3, 6-9, 14, 16, 19, 20 are identified as "canceled";
- in Section 4 is indicated the following Status of Amendments of the application, filed after the Final Action from February 12, 2007:
  - amended claims 1, 12, 17 and 18, filed on May 9, 2007 has been acted upon by examiner and were denied in entry. In the Advisory Action from February 29, 2008 the examiner stated that "for purposes of appeal the proposed amendments will not be entered",
  - amendments in the specification (page 1 line 17), filed on May 9, 2007 have been acted upon by examiner and were accepted. In the Advisory Action from February 29, 2008, the examiner stated that "upon appeal, the amendments to the specification will be entered".
- in the Section 8 the clean copy of claims is provided, as they appear in the amendment filed August 5, 2005. There is enclosed also (see Enclosure 1) the clean copy of claims, where references in claims 11-13, 15, 17, 18 and 22 are corrected in accordance with the observations of examiner.

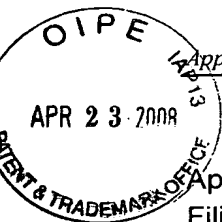
The corrections in the Section 7 of the Appeal Brief were also made.

Faithfully Yours,

Dr. Sergey Matasov

Ph.: (+371) 28850123, 26768686  
Fax: (+371) 67611393  
Address: Ranka dambis 7/1-55, Riga, LV-1048, Latvia  
E-mail: [matasov@hotmail.com](mailto:matasov@hotmail.com)  
<http://www.coloncancer.lv>

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## APPEAL BRIEF

Application No.: 09/509,377  
Filing date: 08/28/2000  
First named inventor: Sergey MATASOV  
Art unit: 3739  
Examiner: Leubecker, John P.  
Mailing date: April 9, 2008

### 1. Real party in interest.

Applicant, inventor Sergey MATASOV

### 2. Related appeals and interferences.

(None)

### 3. Status of claims.

Claim 1 (rejected, under appeal).  
Claims 2-3 (canceled).  
Claims 4-5 (rejected, under appeal).  
Claims 6-9 (canceled).  
Claims 10-13 (rejected, under appeal).  
Claim 14 (canceled).  
Claim 15 (rejected, under appeal).  
Claim 16 (canceled).  
Claims 17-18 (rejected, under appeal).  
Claims 19-20 (canceled).  
Claims 21-22 (rejected, under appeal).

### 4. Status of amendments.

Amended claims 1, 12, 17 and 18, filed on May 9, 2007 has been acted upon by examiner and were denied in entry. In the Advisory Action from February 29, 2008 the examiner stated that "for purposes of appeal the proposed amendments will not be entered".

Amendments in the specification (page 1 line 17), filed on May 9, 2007 have been acted upon by examiner and were accepted. In the Advisory Action from February 29, 2008, the examiner stated that "upon appeal, the amendments to the specification will be entered".

### 5. Summary of claimed subject matter.

The invention relates to the field of medicine, namely to colonoscopy and enteroscopy (*page 1, line 7*).

Concretely the present invention relates to endoscopes, wherein the transportation of an endoscopic tube is provided by an invaginator - a thin-walled tube eversible under fluid pressure (*page 1, lines 12-13*).

The objectives of the invention have been to increase reliability and convenience of introduction of an endoscopic tube, to perform biopsy in flexuous channels (*page 2, line 37-page 3, line 1*).

The increase of safety and convenience of introduction of the endoscopic tube (3) is ensured by the invaginator (23) formed in a compact hollow cylinder, which has a gap (25) with the endoscopic tube (3) (*page 3, lines 16-17, 21-22; Fig. 1*).

Along with the invaginator, the convenience of the introduction is ensured by the mechanism (53) for introduction of the endoscopic tube (3), comprising a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure (*page 3, lines 31-33; Fig. 4c*).

For performing biopsy in flexuous channels the invention comprises a biopsy channel connected to fluid pressure and a biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube and comprise an intensifier (71) of a traction line, which intensifier comprises an executing cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line (*page 4, lines 23-30; Fig. 4d*).

Implementation of said objectives will make colonoscopy available to general practice doctors, easier for experienced endoscopists, gastroenterologists, abdominal surgeons (*page 3, lines 1-2*).

#### **6. Grounds of rejection to be reviewed on appeal.**

Objection concerning identification of reference on SU 1522466 in the specification.

Rejections of claims 11-13, 15, 17, 18 and 22 under 35 USC § 112 second paragraph, as being indefinite.

Rejections of claim 1 under 35 USC § 102(d) as being anticipated by SU 1522466.

Rejections of claims 13 and 15 under 35 USC § 103.

Indication concerning the allowance of claims 12, 17 and 18.

#### **7. Argument.**

**Concerning the section "Specification".**

As to item 2 of the Final Action.

The objection is accepted – the „0000-00-00“ on page 1, line 17 of the disclosure from August 5, 2005 is replaced by “April 20, 1999”, as SU 1522466 became accessible to public

(by MPEP, Section 2128) on April 20, 1999 under the publication of patent application of P-97-190 (LV), which serves as the priority application for the present application No. 09/509,377.

I did not find any information about the identification form of references to an inventor's certificate having the priority and registration dates before the filing date of the priority application and being published after its filing date, but before the filing date of the present application in the Patent and Trademark Office. Therefore additionally are given the following formal data of the Inventors Certificate SU 1522466 by Matasov:

- "Priority of the invention: August 21th, 1978" (see the title-page);
- "Registered in the USSR State register of inventions on July 15th, 1989" (see the title-page);
- "FOR OFFICE USE ONLY COPY № 03" (see the 1<sup>st</sup> page).

On the Online Public File Inspection EPOLINE (<http://www.epoline.org>) the publication of SU 1522466 took place on March 31, 2003, however in the column "publication date" the European PO specified "0000-00-00".

**Concerning the section "Claim Rejections – 35 USC § 112".**

As to item 4 of the Final Action.

Claims 11-13, 15, 17, 18 and 22 were rejected by examiner under 35 U.S.C. 112, second paragraph, as being indefinite.

In the Section 8 is provided the clean copy of claims, as they appear in the amendment filed August 5, 2005. There is enclosed also (see Enclosure 1) the clean copy of claims, where the references in claims 11-13, 15, 17, 18 and 22 are corrected in accordance with the observations of examiner.

**Objections concerning the section "Claim Rejections – 35 USC § 102".**

As to item 6 of the Final Action (concerning the argumentation of novelty of the claim 1).

The examiner rejected the claim 1 under 35 U.S.C. 102(d) as being anticipated by SU 1522466. At that was alleged that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and that "Inherently there is a gap between the cylinder and the endoscopic tube".

In accordance with 37 CFR § 1.192 (c)(8)(iii) an applicant should specify the errors in the rejection and why the rejected claim is patentable under 35 U.S.C. §102.

The error in the rejection are examiner's allegations that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and that "Inherently there is a gap between the cylinder and the endoscopic tube", as there is no arguments in favour of these allegations. Thereupon examiner did not cited any arguments.

So in order to prove the patentability of claim 1, there should be refuted examiner's assertions that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and "Inherently there is a gap between the cylinder and the endoscopic tube".

SU 1522466 comprises 5 obvious evidences of friable (non-compact) structure of invaginator and of absence of a gap between it and the light pipe 3. So, invaginator by SU 1522466:

1. *"is executed as pleated"* (see the Claims; column 3, line 3 and others; drawing), that is it has small parallel pleats, which facilitate its gathering on the light pipe 3;
2. is *"gathered on the light pipe 3"* (see column 4, lines 19-20);
3. is *"adjacent to the light pipe"* (see the Claims; column 3, line 2);
4. could be longitudinally compressed (see column 3, lines 48-51);
5. cuddles to the light pipe 3 under the action of working pressure (see col. 4, lines 47-49);

Besides, in the text of SU 1522466 there are absent:

- word-combination "formed of a compact cylinder",
- word-combination "compact cylinder",
- word "cylinder",
- word "gap".

The detailed description of friability (non-compactness) of the pleated invaginator and absence of its gap with an endoscopic tube, is both in the SU 1522466 and in the present application:

- *"When the difficulties appears with the insertion of the light pipe 3 ... there is necessary to reduce on few seconds the pressure to zero and then repeatedly raise it till the working level and to continue insertion of the light pipe. In the moment of absence of pressure the pleated part of tube does not cuddle to the light pipe and under the action of spring 10 is able to displace to the projection 6 on the place of tube, which has turned into everted part."* (see SU 1522466, column 4, lines 40-53);
- "The invaginator is to be everted under tip 6, but during invagination the distal part of tube 3 becomes bared. It can be due both to lack of a gap between tube 3 and uneverted part of the invaginator and to a friable structure of the latter, which under the action of air pressure adheres to tube 3." (see the original specification of the invention from October 2, 1998, page 1, lines 37-41);

By its compactness the pleated invaginator according to SU 1522466 and the invaginator according to the present application could be compared approximately as a haystack and a wafer of hay or sawdust and an article, pressed from it. Here are 5 positive differences of invaginator according to the present application, formed in a compact hollow cylinder which has a gap with endoscopic tube. So, the compact hollow cylinder of invaginator according to the present application:

1. "is formed of crumpled and tightly compressed in longitudinal and transverse directions short layers of different forms of an eversible thin-walled tube" (see the original specification from October 2, 1998, page 3, lines 24-25);
2. is not gathering on the endoscopic tube, but is putting on it as a whole,
3. does not adjacent to the endoscopic tube, because the diameter of the inner forming (moulding) rod is larger than the diameter of the endoscopic tube,
4. could not be longitudinally compressed because is formed in the longitudinal direction,
5. does not cuddle to the endoscopic tube under the action of working pressure, because is formed in the transverse direction.

One can see evidently from above, that invaginator according to the present application formed in a compact hollow cylinder which has the gap with the endoscopic tube, is not the subject-matter of SU 1522466. Therefore, the rejection of claim under 35 U.S.C. 102(d) as anticipated by SU 1522466, is an error.

Please, also note that from 9 patent offices, which made the examination of the application PCT/LV98/00006, solely the USPTO asserted, that the invaginator, formed in a compact hollow cylinder which has a gap with the endoscopic tube, is disclosed in the inventors certificate SU 1522466.

As to item 6 of the Final Action (concerning the essential reason of rejection of claim 1).

On November 11, 2007 I have received the letter from Mr. A. Tilson from California (see enclosure in Section 9), with the following question:

*"Sightline product seems very similar to yours. How does it work without affecting your earlier i.p.?"*

Inventions according to my application and the application PCT/IL00/00017 by Sightline Technologies, Ltd. were examined by the same examiner. So, Mr. Leubecker:

- performed the International Search for the application PCT/IL00/00017 by Sightline,
- on the national stage in 6 months performed the examination of the application by Sightline,
- on November 26, 2002 granted the patent № 6,485,409 according the application by Sightline, wherein the independent claim 1 is anticipated by my inventor's certificate SU 1522466 and the independent claim 4 - by claim 1 of my application.

At that, Mr. Leubecker has ignored 3 available to all sources of information:

1. during the International Search – the publication of my priority application from February 20, 1999 and the publication WO 99/17655 from April 15, 2000,
2. during the national phase – my application 09/509,377, though at the same time he performed the examination both of Sightline and of my applications,

3. the inventor's certificate SU 1522466 disclosed in all publications of my application: from the priority application till the 09/509,377, as well as in others patent offices' applications.

Please, note that along with ignorance of SU 1522466 during examination of Sightline's application, the examiner ungroundly opposed it to my application 09/509,377.

Besides, the examiner took no notice of my petitions from January 21, 2003 and September 1, 2004 concerning the infringement of 35 USC § 102 by the patent of Sightline № 6,485,409.

**So, the essential reason of rejection of my invention lies in fact, that it affects the illegal rights of Sightline and the actions of examiner Mr. Leubecker.**

As to item 6 of the Final Action (concerning the claims 4, 5, 10, 11, 21, 22).

The examiner rejected the claims 4, 5, 10, 11, 21, 22 under 35 U.S.C. 102(d) as being anticipated by SU 1522466.

As above is well-proven that the invaginator, formed in a compact hollow cylinder which has a gap with an endoscopic tube, is not a subject-matter of SU 1522466, the dependent claims 4, 5, 10, 11, 21, 22 could not be rejected under 35 U.S.C. 102(d).

**Concerning the section "Claim Rejections – 35 USC § 103".**

As to items 8, 9 of the Final Action.

The examiner rejected under 35 U.S.C. 103(a):

- claim 13 as being unpatentable over Matasov in view of Avitall (U.S.Pat. 5,441,483),
- claim 15 as being unpatentable over Matasov in view of Wilk et al. (U.S.Pat. 5,396,879).

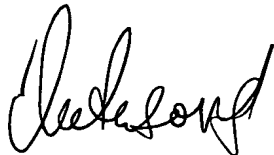
As above is well-proven that the invaginator formed in a compact hollow cylinder which has a gap with an endoscopic tube, is not the subject-matter of SU 1522466, the dependent claims 13 and 15 could not be rejected under 35 U.S.C. 103(a).

**Concerning the section "Allowable Subject Matter".**

As to item 10 of the Final Action.

In the Section 8 the clean copy of claims is provided, as they appear in the amendment filed August 5, 2005. There is also enclosed (see Enclosure 1) the clean copy of claims, where the references in claims 12, 17, 18 are corrected in accordance with the observations of examiner.

Faithfully Yours,  
Dr. Sergey Matasov



Ph.: (+371) 28850123, 26768686  
Fax: (+371) 67611393  
Address: Ranka dambis 7/1-55, Riga, LV-1048, Latvia  
E-mail: matasov@hotmail.com  
www.coloncancer.lv

## 8. Claims appendix.

I claim:

1. An endoscope with disposable cartridges for the invagination of endoscopic tube, comprising
  - o an endoscopic tube (3) having a distal part with a guided distal end,
  - o a disposable cartridge located on the distal part of the endoscopic tube (3) and comprising an invaginator of the endoscopic tube, which invaginator is an eversible tube with an uneverted end (7) joined with the endoscopic tube (3), and an uneverted part of invaginator formed by pleats into a compact hollow cylinder (23), having a gap (25) with the distal part of the endoscopic tube (3).
4. The endoscope according to claim 1, wherein the cylinder (23) of the invaginator comprises narrowings (24) of its external diameter and widenings (24) of its internal diameter.
5. The endoscope according to claim 1, wherein the cartridge comprises a shell (22), which contains the cylinder (23) of the invaginator.
10. The endoscope according to claim 1, wherein the cartridge comprises a preservative (26) of the distal part of the endoscopic tube (3), which preservative is united with a tip (6) of the endoscopic tube (3) and comprises areas (28) for the hermetic fixation to the endoscopic tube (3).
11. The endoscope according to claim 4, wherein the tip (6) comprises a protective glass (33).
12. The endoscope according to any of claims 1 to 6, further comprising a mechanism (53) for introduction of the endoscopic tube (3) into the everted part of invaginator, which mechanism comprises a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure.
13. The endoscope according to any of claims 1 to 6, wherein the endoscopic tube (3) comprises internal transverse pleats (48) of its external cover.
15. The endoscope according to any of claims 1 to 6, wherein the endoscopic tube (3) comprises distal drives of traction lines (40, 41), bending the distal end of the endoscopic tube (3), which drives comprise executing cylinder-piston units.
17. The endoscope according to any of claims 1 to 6, wherein the endoscopic tube (3) comprises a biopsy channel, connected to fluid pressure and biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube.
18. The endoscope according to claim 11, wherein the biopsy forceps (63) comprise an intensifier (71) of a traction line, which intensifier comprises an executing cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line.
21. The endoscope according to claim 5, wherein the tip (6) comprises a channel (32) for inflation of the intestines and prevention of ingress of intestinal contents under the protective glass (33).
22. The endoscope according to any of claims 4 to 6, wherein the endoscopic tube (3) comprises areas (28) for the hermetic fixation of the distal preservative (26) united with the tip (6).

Faithfully Yours,

Dr. Sergey Matasov

Ph.: (+371) 28850123, 26768686

Fax: (+371) 67611393

Address: Ranka dambis 7/1-55, Riga, LV-1048, Latvia

E-mail: [matasov@hotmail.com](mailto:matasov@hotmail.com) [www.coloncancer.lv](http://www.coloncancer.lv)

## 9. Evidence appendix.

Device

**Alex Tilson** (atilson@mba1999.hbs.edu)

Sunday, November 11, 2007 1:50:42 AM

atilson@mba1999.hbs.edu

□ EP1036539...pdf (774.1 KB), 06485409\_...tif (527.3 KB)

Dear Sergey,

Hello, my name is Alex Tilson. I live in California and am doing a project on devices that facilitate improved colonoscopy.

I ran across your patent and then found your website. I also saw your article with your vision of what colonoscopy can be in the future: it should be painless, it could be done by family practitioner, I couldn't agree more.

Of all of the potential next-gen devices, the only one that I know of that has made it to market in America is Sightline. well, at least they are due to come to market before the end of the year.

There is also Spirus, but their product doesn't really work. Sightline product seems very similar to yours. how does it work without affecting your earlier i.p.?

I see that you are a physician. do you use your product in the clinic and, if so, how well does it work?

Congratulations of your fine work.

Sincerely,

Alex Tilson

home phone 28650 29 347-1576

P.S. Though I have never been to Latvia, I did bicycle across much of the former Soviet Union.

See our website [www.rutmans.org/Trek](http://www.rutmans.org/Trek)

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**10. Related proceedings appendix.**

(None)

Enclosure 1

**Claims appendix (clean copy of claims with corrected references).**

1. An endoscope with disposable cartridges for the invagination of endoscopic tube, comprising
  - o an endoscopic tube (3) having a distal part with a guided distal end,
  - o a disposable cartridge located on the distal part of the endoscopic tube (3) and comprising an invaginator of the endoscopic tube, which invaginator is an eversible tube with an uneverted end (7) joined with the endoscopic tube (3), and an uneverted part of invaginator formed by pleats into a compact hollow cylinder (23), having a gap (25) with the distal part of the endoscopic tube (3).
4. The endoscope according to claim 1, wherein the cylinder (23) of the invaginator comprises narrowings (24) of its external diameter and widenings (24) of its internal diameter.
5. The endoscope according to claim 1, wherein the cartridge comprises a shell (22), which contains the cylinder (23) of the invaginator.
10. The endoscope according to claim 1, wherein the cartridge comprises a preservative (26) of the distal part of the endoscopic tube (3), which preservative is united with a tip (6) of the endoscopic tube (3) and comprises areas (28) for the hermetic fixation to the endoscopic tube (3).
11. The endoscope according to claim 10, wherein the tip (6) comprises a protective glass (33).
12. The endoscope according to any of claims 1, 4, 5, 10, 11 or 21, further comprising a mechanism (53) for introduction of the endoscopic tube (3) into the everted part of invaginator, which mechanism comprises a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure.
13. The endoscope according to any of claims 1, 4, 5, 10, 11 or 21, wherein the endoscopic tube (3) comprises internal transverse pleats (48) of its external cover.
15. The endoscope according to any of claims 1, 4, 5, 10, 11 or 21, wherein the endoscopic tube (3) comprises distal drives of traction lines (40, 41), bending the distal end of the endoscopic tube (3), which drives comprise executing cylinder-piston units.
17. The endoscope according to any of claims 1, 4, 5, 10, 11 or 21, wherein the endoscopic tube (3) comprises a biopsy channel, connected to fluid pressure and biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube.
18. The endoscope according to claim 17, wherein the biopsy forceps (63) comprise an intensifier (71) of a traction line, which intensifier comprises an executing cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line.
21. The endoscope according to claim 11, wherein the tip (6) comprises a channel (32) for inflation of the intestines and prevention of ingress of intestinal contents under the protective glass (33).
22. The endoscope according to any of claims 10, 11 or 21, wherein the endoscopic tube (3) comprises areas (28) for the hermetic fixation of the distal preservative (26) united with the tip (6).

Faithfully Yours,  
Dr. Sergey Matasov

